



Nutritional genomics is an area of science that looks at how environmental factors, such as diet, influence our genetic make-up. **Genes** are the packages of genetic material that tell our body how to grow and develop. Our genes can increase or decrease the risk a person will develop a certain disease. The more information we know about our genetic make-up, the more we can focus on making recommendations for a healthy life that are specific to each person's risk. Currently, most recommendations for a healthy lifestyle are "one size fits all," meaning that every person gets the same recommendations about health and wellness.

Nutritional genomics studies how food affects our health. It looks at how each person's body uses nutrients (such as vitamins) from food, as well as how those nutrients change the way a person's body works.

Diet and exercise play a large role in decreasing a person's risk of disease, but this may mean different things for different people. Nutritional genomics has many possibilities. Using specific nutrients to prevent or manage certain diseases (such as diabetes or cancer) is becoming more possible every day. Centers for research in nutritional genomics are beginning to open throughout the United States and worldwide.

The study of nutritional genomics is exciting and new; however, there is still a lot to learn. For this reason, it's still recommended that people eat a diet of whole grains, fruits and vegetables, moderate amounts of low-fat meat, and dairy for the best protection against some diseases.

For more information on nutritional genomics, visit the University of California – Davis Center of Excellence for Nutritional Genomics

Find your personalized diet plan using the United States Department of Agriculture Personalized Food Guide Pyramid. This provides a diet based plan based on your sex and age, rather than your specific genetic makeup.